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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/535,623	12/02/2005	Scijiro Tomita	050318	7511
21874 7590 04/29/2008 EDWARDS ANGELL PALMER & DODGE LLP P.O. BOX 55874 BOSTON, MA 02205				
EXAMINER				
CHOW, YUK				
ART UNIT		PAPER NUMBER		
2629				
MAIL DATE		DELIVERY MODE		
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**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

### Office Action Summary

**Application No.**

10/535,623

**Applicant(s)**

TOMITA, SEIJIRO

**Examiner**

YUK CHOW

**Art Unit**

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --  
**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 24 January 2008.  
2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.  
3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1-4, 6 and 7 is/are pending in the application.  
4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.  
5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.  
6) ☒ Claim(s) 1-4, 6 and 7 is/are rejected.  
7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.  
8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.  
10) ☒ The drawing(s) filed on 24 January 2008 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).  
11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).  
a) ☐ All b) ☐ Some \* c) ☐ None of:  
1. ☐ Certified copies of the priority documents have been received.  
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.  
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- 1) ☐ Notice of References Cited (PTO-892)  
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)  
3) ☐ Information Disclosure Statement(s) (PTO/S508)  
Paper No(s)/Mail Date \_\_\_\_\_  
4) ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date \_\_\_\_\_  
5) ☐ Notice of Informal Patent Application  
6) ☐ Other: \_\_\_\_\_

**DETAILED ACTION**

***Claim Rejections - 35 USC § 102***

1. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

2. Claim 1 is rejected under 35 U.S.C. 102(b) as being anticipated by Yamazaki et al (PGPUB US 2003/0058210 A1).

As to claim 1, Street discloses a light source device for display having an image display means, wherein the image display means forms an image using transmitted light, the light source device comprising:

an LED array (Fig. 1(104)) having a plurality of white LEDs or RGB LEDs (Fig. 3(304)) an arranged in array, and the white LEDs or RGB LEDs being arranged so as to synchronize (Fig. 5 (V<sub>SYNC</sub>) also see [0064]) with an image signal to have a turn-on and turn-off controlled at high speed ([0053]),

wherein the image signal is used to form an image on the image display means.  
(see [0056], original image signal is used to convert to RGB video signal, then form an image on LCD panel, see [0057] and Fig. 14, which is a block diagram of this process).

***Claim Rejections - 35 USC § 103***

3. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

4. Claims 2-4 are rejected under 35 U.S.C. 103(a) as being unpatentable over Yamazaki et al (PGPUB US 2003/0058210 A1) in view of Suzuki et al (US Patent 6,757,422).

As to claim 2, Yamazaki discloses a light source device for display according to claim 1 above, and the LEDs are arranged in a linear configuration (Fig. 1(103)).

However Yamazaki does not teach a convex lens or a Fresnel lens is arranged between the light source device and a liquid crystal display.

Suzuki discloses a viewpoint position detection for stereoscopic image display system, which uses lenticular lens (Fig. 15(220, 230)) in between light source (Fig. 15(250)) and LCD (Fig. 15(210)).

It would have been obvious to one of ordinary skill in the art at the time of the invention was made to use the lenticular lens of Suzuki with display device of Yamazaki, because lenticular lens are used to diffuse the light so that viewing angle could be improved.

As to claim 3, Suzuki discloses a viewpoint position detection for stereoscopic image display system, which teaches light source are turned on and scanned at high speed in vertical and horizontal directions (Fig. 18 (Hm, Vm) also see Col. 22 line 39 – Col. 23 line 36).

As to claim 4, Suzuki discloses a light source device for display according to claim 2, wherein the display has a position identifying means (Fig. 14(120)) which measures a position of an observer relative to the display and outputs a corresponding position signal, and a means for controlling (Fig. 14(320)) LED turn-on performs a turn-on control on the white LEDs or RGB LEDs based on the position information so as to keep an image viewable by the observer.

5. Claim 6 is rejected under 35 U.S.C. 103(a) as being unpatentable over Yamazaki in view of Suzuki as applied to claim 2 above, and further in view of Street (US Patent 5,936,774).

As to claim 6, Yamazaki and Suzuki disclose a light source device for display according to claim 2 above.

However, Yamazaki and Suzuki does not teach the position identifying means, which counts the number of observers, measures positions of the observers relative to the display and outputs corresponding position signals.

Street discloses an autostereoscopic display, which allows for multiple viewers (Fig. 5B(52) and Col. 11 lines 11-36).

It would have been obvious to one of ordinary skill in the art at the time of the invention was made to incorporate the capability of having multiple viewers of Street into light source device of Yamazaki, this provide additional mode in which the LCD screen operates as a conventional display. This is an advantage according to Street (see Col. 2 lines 16-19).

6. Claim 7 is rejected under 35 U.S.C. 103(a) as being unpatentable over Yamazaki et al (PGPUB US 2003/0058210 A1).

As to claim 7, Yamazaki discloses a light source device for display according to claim 1 in embodiment 1.

However, embodiment 1 of Yamazaki does not teach wherein the display is used on displays of television sets, game machines, personal computers, cell phones or mobile terminals.

Embodiment 10 of Yamazaki teaches a wide range of application: television sets (Fig. 24(C)), game machines (Fig. 24(B)), personal computers (Fig. 24(A)), cell phones (Fig. 21(A)) or mobile terminals (Fig. 21(C)).

It would have been obvious to one of ordinary skill in the art at the time of the invention was made to apply the display device of Yamazaki into multimedia device, since it is capable of minimizing the flicker and the having a high resolution.

### ***Response to Arguments***

7. Applicant's arguments filed 01/24/2008 have been fully considered but they are not persuasive.

Regarding claim 1, applicant argues Yamazaki does not disclose or suggest the operation of LEDs is synchronized with an image signal used to form an image on the image display mean.

However, examiner respectfully disagrees.

According to claim 1, interpretation of claimed subject matter, "the white LEDs or RGB LEDs being **arranged** so as to **synchronize** with an image signal to have a turn-on and turn-off controlled at high speed, wherein the image signal is used to form an image on the image display means." is merely an operation of arranging and synchronizing LEDs, then forming an image on a display mean, the terms arranged and synchronized do not specifically define any particular way to carry out this operation.

Paragraph [0064] of Yamazaki has be cited for teaching of arranging and synchronizing of the LEDs with an image signal, then Fig. 14 of Yamazaki illustrates the process of forming an image on a display mean.

Even with the amended claim 1, there still isn't a clear distention between applicant's claimed invention and examiner's cited prior art.

### ***Conclusion***

**THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO MONTHS** of the mailing date of this final action and the advisory action is not mailed until after the end of the **THREE-MONTH** shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of

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the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to YUK CHOW whose telephone number is (571)270-1544. The examiner can normally be reached on 8-6 M-TH E.T..

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Amare Mengistu can be reached on 571 272-7674. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/Y. C./

Examiner, Art Unit 2629

/Amare Mengistu/  
Supervisory Patent Examiner, Art Unit 2629